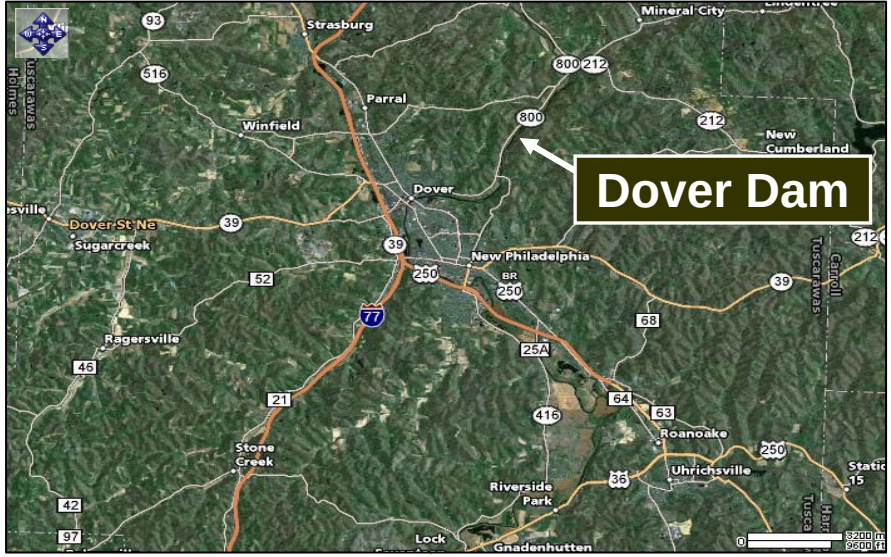
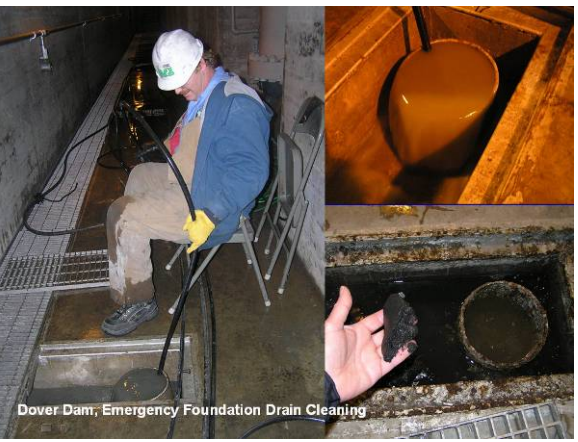




Dover Dam Emergency Foundation Drain Cleaning January 2005

What Can You Do?

If you live near the Tuscarawas River downstream of Dover Dam, check to see if your property lies within a designated flood area as shown on the Tuscarawas County developed flood inundation maps available at your County Emergency Management Office and County Library. If you are in or near a designated flood area, you may want to review the Tuscarawas County Emergency Evacuation Plan and:

- Develop a plan of evacuation for your family to a designated gathering place
- Practice your evacuation plan
- Secure your property by locking doors and outbuildings upon departure
- Establish a contact person or persons outside the flood area for check-in
- Purchase a weather band radio for early warning
- Consider purchasing flood insurance (strictly a personal choice)

Phone: 304-399-5170
Rodney Cremeans – Project Manager

For Project Updates, You May Access the Corps Website at:
http://www.lrh.usace.army.mil/projects/current/doverrehab

US Army Corps Of Engineers
Huntington District

One Team: Relevant, Ready, Responsive, Reliable

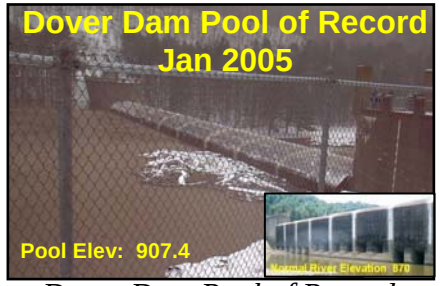
Dover Dam
Rehabilitation

The Dover Dam is located on the Tuscarawas River in Tuscarawas County, Ohio. The dam is a concrete gravity dam founded in limestone and shale. Construction of the Dover Dam was completed on 29 November 1937. The Dover Dam is generally founded at elevation 850. The top of the spillway section is elevation 916 (66 feet tall) and the top of the non-overflow section is elevation 931 (81 feet tall). The width of the spillway section is 338 feet. The total width of the dam is 824 feet.

Dover & Bolivar Dam Safety Assurance History

Looking Upstream at Dover Dam's Spillway and Outlet Works

The Dover Dam is a dry dam – the Dover Dam allows the Tuscarawas River to flow freely through the dam for a significant portion of time and only retains water when necessary for flood protection and flood damage reduction. Control of water is achieved by six, 5-foot wide by 10-foot tall sluices, and twelve, 7-foot wide by 7-foot tall sluices. The pool of record occurred in January 2005 and was elevation 907.4, approximately a 72-year event. The Dover Dam is owned, operated and maintained by the U.S. Army Corps of Engineers.



Dover Dam Pool of Record

The Huntington District, U.S. Army Corps of Engineers has recently analyzed and conducted stability analyses of Dover and Bolivar dams using modern day design standards with the latest information available. The current analysis for Dover indicates that the dam is safe through pool elevations up to and including 909 feet, or 51 feet on the Dover dam gage. Bolivar dam has seepage problems and through previous analysis was thought to be safe through pool elevations up to and including 949 feet, or 54 feet on the Bolivar dam gage, however due to several unexpected artesian-type boils that occurred at pool elevations of 935-936 feet during the March 2008 event, future safe operating elevations may be somewhat less. Pools above these elevations do not necessarily mean imminent dam failure, rather concerns regarding the possibility of a dam failure increase as pool elevations rise above these thresholds. In the history of the Dover dam, the pool upstream of the dam has reached alert pool, elevation 900, only four times and has reached elevation 907 once.

The Corps of Engineers is committed to operating the dams within a safe range of pool elevations. To minimize the potential of the pool elevation at these dams from reaching these thresholds, the Corps may be required to release above current downstream flood control levels. The dams will continue to provide downstream flood protection against rainfall events similar to what has historically occurred.

Although the possibility exists, there is a low likelihood of experiencing downstream inundation worse than experienced in January 2005 for the period prior to completion of the dam improvements. The operation of Dover and Bolivar dams is largely dependent on the rainfall, ground saturation, pool elevation and other conditions at the time. Therefore, if an extreme event occurs, monitor local communications and please follow all notices for evacuation or otherwise as directed by your local and community officials.

The Corps of Engineers is working closely with Tuscarawas County Officials to help develop downstream inundation mapping and identifying various inundation areas for emergency planning purposes. The inundation mapping will associate probabilities in terms of low, very low, and extremely low likelihood for the period prior to completion of the improvements to the dams. Other interim risk reduction measures under consideration for Dover dam include one structural improvement and several other non-structural measures.